REMARKS/ARGUMENTS

Claims 21-23 are active and drawn to the elected subject matter.

Claim 21 is a combination of previously presented claims 1, 2, 4, 5, 6, 7 and 16 with the functional layers defined as solar control or low-emissivity (multi)layers as supported in the specification at page 6, lines 29-39.

Claims 22-23 correspond to previously presented claims 3 and 8 rewritten to depend from new claim 21.

No new matter is added.

As presented here, the invention defined in Claim 21, includes:

functional layers deposited on the second face by cathode sputtering;

titanium dioxide coating deposited on the first face by cathode sputtering;

heating at temperatures greater than 630°C, after deposition of coatings on both sides where crystallization of anatase is obtained through this heat treatment

The invention makes it possible to obtain in a simple manner a glazing having 2 properties : self-cleaning for the outside part of the building and low-emissivity or solar control for the inside part of the building. Deposition is made by sputtering on both sides, and is followed by a heat treatment at high temperatures (above 630°C).

Further, as discussed on page 2 of the application, the inventors have succeeded in obtaining high photocatalytic activity and high optical quality by crystallizing the titanium dioxide at the temperatures of conventional glass heat treatments, thereby achieving this crystallization by the single toughening or other heat treatment and avoiding an additional subsequent heating operation at a more moderate temperature.

The rejections under 35 USC 102(b) citing Honjo or under 35 USC 103(a) citing Honjo with Greenberg and then Krisko are no longer applicable as Claims 1-3 have been cancelled.

Further, Claim 21 is a combination of previously presented claims 1, 2, 4, 5, 6, 7 and 16 with the functional layers defined as solar control or low-emissivity (multi)layers.

Honjo et al. does not describe sputtering methods, even less methods where both sides of the glass are coated. Instead, Honjo describes sol-gel methods such as spin coating or dip coating (see §20). Therefore the baking that Honjo describes (see §21) is to bond more firmly the coating to the glass, and to increase chemical and mechanical resistance by densifying the coating. Sol-gel coatings are porous and not resistant unless they are baked at high temperatures. The baking step is not disclosed in relationship with crystallization of titanium dioxide in anatase form. On the contrary, sputtered coatings are dense and resistant even without heat treatment.

Therefore, it should be apparent why Claims 21-23 are not anticipated by Honjo.

To the rejection combining Honjo with Greenberg.

Honjo is discussed above. Greenberg at al does not describe the heating and crystallization at temperatures above 630°C. Greenberg teach temperatures between 400 and 600°C (see col 8, line 43). This is because it was thought that heat treating at higher temperatures would convert anatase into rutile, thereby decreasing the photocatalytic activity. (see, e.g. the attached article Jamieson et al(1969) *Mineralogical Notes* 54:14771481 showing (see figure 2, page 1480) that the transition anatase-rutile takes place at 600°C or less). However, as shown by the examples of the application, this is surprisingly not the case, and treatments above 600°C make it possible to temper or bend the glass, without lowering the photocatalytic activity, on the contrary. (see page 8 Table I and lines 16-23).

Moreover, Greenberg et al do not disclose or suggest the deposition of low emissivity or solar control layers by sputtering on the other side of the glass. Rather Greenberg only teaches the deposition of barrier layers ("SIBD" layers) under the titanium coating, i.e. on the same side. A barrier layer would be not be useful if deposited on the other side of the glass than the one carrying the titanium coating.

Applicants disagree with the presumption of the rejection in the first place in that one would not have combined these references, because they teach very different deposition processes that have nothing in common: sol-gel on one hand and sputtering or pyrolysis on the other hand. Further, even if one were to combine these references, Honjo and Greenberg do not teach all of the limitations of the claims and, in fact, teach away from certain features of the claims, including the heating temperature and the arrangement of layers. Finally, nothing in the combination of Honjo and Greenberg teach the surprising results obtained by the inventors as discussed hereinabove.

Withdrawal of the rejection combining Honjo and Greenberg is requested.

Finally, to the rejection combining Honjo and Greenberg with Krisko. This rejection is to allege that the features of previously pending Claim 8 (now Claim 22) would have been obvious (see page 6 of the Action). However, as discussed above, Honjo and Greenberg would not have been combined, Honjo and Greenberg teach away from what is claimed, and nothing in the art teaches the surprising results obtained by the inventors (see again, e.g., page 8 of the present specification). As Krisko does not remedy these core deficiencies, the claims would not have been obvious in view of the combined teachings of these cited publications.

Withdrawal of the rejections is requested.

A Notice of Allowance is requested.

Respectfully submitted,

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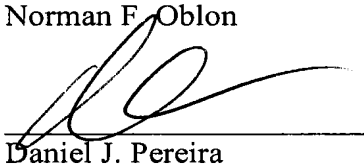

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